XPand5200 Series

End of Life

Sub-½ ATR, Natural Convection-Cooled or Conduction-Cooled Chassis for Four Conduction-Cooled Modules

Please see XPand6200 Series

- ½ ATR natural convection-cooled or conduction-cooled chassis (reduced height and length)
- Four conduction-cooled 0.8 in. slots
- Physical dimensions of 10.30 in. (L) x 4.88 in. (W) x 5.65 in. (H)
- 3U VPX and cPCI backplanes available
- Non-volatile SSD memory (optional)
- PCI Express fabric backplane (optional)
- Gigabit Ethernet fabric backplane (optional)
- Configurable front panel I/O connectors
- Integration services with third-party modules available
- Integrated MIL-STD-704 28 VDC power supply
- MIL-STD-461 E/F EMI filtering
- Internal holdup of up to 100 ms at 70 W (optional)
- Foldable front panel handle
- Environmentally sealed

XPand5200 Series

The XPand5200 Series redefines the limits of power, performance, and functionality in a sub-½ ATR chassis. This natural convection-cooled or conduction-cooled, fully ruggedized chassis is designed to meet the rigorous standards of MIL-STD-810 while integrating the latest power-saving and performance-enhancing technology. In today's avionics and ruggedized environments, size really does matter, and the XPand5200 sets a new standard for sub-½ ATR computing.

Depending on your processing requirements, systems based on the XPand5200 Series can be populated with up to four high-performance, low-power, 3U VPX or cPCI modules designed and manufactured by X-ES. X-ES also has an extensive lineup of XMC and PMC solutions to fulfill your data-processing and I/O requirements. Additionally, X-ES provides integration services for third-party modules.

Optional non-volatile SSD memory provides the convenience of high-capacity storage and the ruggedness of solid-state memory. X-ES maximizes power supply performance, supporting an integrated MIL-STD-704 28 VDC power supply. Internal EMI filtering and hold-up for up to 100 ms at 70 W is also provided.

Please contact X-ES sales to begin designing a system that will meet or exceed your I/O, processing, and power requirements.

X-ES
Extreme Engineering Solutions

"Fast, Flexible, Customer-Focused Embedded Solutions"

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Physical Characteristics

- ½ ATR-compliant, natural convection-cooled or conduction-cooled chassis (reduced height and length)
- Dimensions: 10.30 in. (L) x 4.88 in. (W) x 5.65 in. (H)
- Four 0.8 in. slots support conduction-cooled 3U VPX, 3U cPCI, or power supply modules
- Boards are inserted in the back of the chassis in a vertical orientation
- Foldable front panel handle

Backplane Options

- 3U VPX
- 3U cPCI
- Two high-power payload slots
- Up to two lower-power payload slots for I/O or non-volatile SSD memory
- One power supply slot or optional integrated power supply
- Custom backplane solutions available
- PCI Express or Gigabit Ethernet switching (optional)

Front Panel I/O Options

- Up to three D38999 circular connectors for I/O
- DVI graphics interfaces
- USB 2.0- and 1.0-compliant interfaces
- 10/100/1000BASE-T Gigabit Ethernet interfaces
- RS-232/422 serial links
- MIL-STD-1553
- ARINC 429
- Custom I/O via PMC/XMC modules
- Custom I/O via third-party modules

Power Supply Options

- MIL-STD-704 28 VDC input voltage support (default)
- Up to 100 ms internal holdup time at 70 W (optional)
- Additional power supply options available

Thermal

At 55°C ambient and 200 LFM ambient airflow at sea level

- Maintains 85²C board rail temperatures with up to 105 W total chassis power dissipation
- Two high-power payload slots at up to 40 W each
- One lower-power payload slot at up to 10 W
- Conduction through the base plate can provide additional cooling